



NOTES:

1. THIS IS A ULTRA - HIGH - VACUUM ASSEMBLY (UHV). KEEP THE UHV PARTS CLEAN DURING ASSEMBLY, AND AND WRAP UP FOR PACKING WITH ALUMINUM FOIL.

2. WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
A) CIMCOOL 5 STAR 49
B) TRIM SOL

3. THIS IS A UHV PART, ELECTROPOLISHING IS NEEDED BEFORE WELDING. PRIOR TO ELECTROPOLISHING, THE PART MUST GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING AND DRY NITROGEN BLOW DOWN.

4. THE ASSEMBLY SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2X 10⁻¹⁰ STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS:

ALCATEL ASM-11OTCL
VARIAN NCR 925 OR 936
VEECO MS-9, MS-90 OR MS-18
Du Pont CEC 24-120B

CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING.

FINAL TEST WILL CONSIST OF SURROUNDING THE CHAMBER (BAGGING) WITH HELIUM. THE CHAMBER WILL BE REJECTED IF A 2% DEFLECTION IN THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.

5. DIMENSIONS IN [] ARE MILLIMETERS AND FOR REF. ONLY

REF. SOURCE

1 MCD VACUUM PRODUCTS CORP.
23842 CABOT BLVD.
HAYWARD, CA 94545-1651
1-800-443-8817
FAX: 510-887-0626

2 STANDARD BELLOWS CO.
375 ELLA T. GRASSO TURNPIKE
WINDSOR LOCKS, CT. 06096
1-203-623-2307
FAX: 203-623-0398

7		.63 O.D. X .035 W. X 1.33 LG. TUBING	SST	1
6		1.88 O.D. X .065 W. X 1.00 LG. TUBING	SST	1
5	#250-175-10-AA	WELDED BELLOW	SST	1
4		1.88 O.D. .065 WALL TUBING	SST	1
3		.63 O.D. X .035 W. X 1.98 LG. TUBING	SST	1
2	#100004	1.33 O.D. ROTATABLE VACUUM FLANGE	SST	1
1	#100015	3.38 O.D. ROTATABLE VACUUM FLANGE	SST	2
ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES TOLERANCES: DECIMALS: .125 FRACTIONS: 1/16, 1/8, 3/16, 1/2, 3/4, 1, 1 1/2, 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24, 30, 36, 48, 60, 72, 96, 120, 144, 180, 216, 240, 288, 360, 432, 480, 576, 720, 864, 1008, 1152, 1440, 1728, 2160, 2592, 3168, 3888, 4752, 5760, 6912, 8448, 10368, 12672, 15552, 19200, 23040, 28128, 34368, 41856, 50880, 61632, 75264, 91680, 111456, 136512, 167136, 204288, 249024, 303360, 368256, 445824, 538080, 647040, 784896, 954720, 1161600, 1412160, 1717440, 2090880, 2543360, 3086880, 3739392, 4521984, 5454720, 6568800, 7894272, 9461184, 11399616, 13760544, 16713600, 20428800, 24902400, 30336000, 36825600, 44582400, 53808000, 64704000, 78489600, 95472000, 116160000, 141216000, 171744000, 209088000, 254336000, 308688000, 373939200, 452198400, 545472000, 656880000, 789427200, 946118400, 1139961600, 1376054400, 1671360000, 2042880000, 2490240000, 3033600000, 3682560000, 4458240000, 5380800000, 6470400000, 7848960000, 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